

INVASIVE SPECIES & EXOTIC PESTS

Cherry Bark Tortrix Moth

Enarmonia formosana

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A relatively new exotic pest in North America, cherry bark tortrix was found in British Columbia in 1989, in Washington in 1991, spread to Oregon, and has now established itself as a pest of ornamental cherries in the Pacific Northwest. Cherry bark tortrix is known throughout Europe, south to coastal North Africa and west to Siberia. In its native homeland, because parasitic wasps and other natural enemies keep populations low, it rarely causes economic damage or requires treatment. However, because cherry bark tortrix is an introduced pest in the Pacific Northwest, natural enemies have not yet appeared to a significant degree. Larvae tunnel into the bark and feed on phloem tissues, causing damage to trunks and major limbs. The insect infests trees in the rose family, including cherry and apple.

Concern

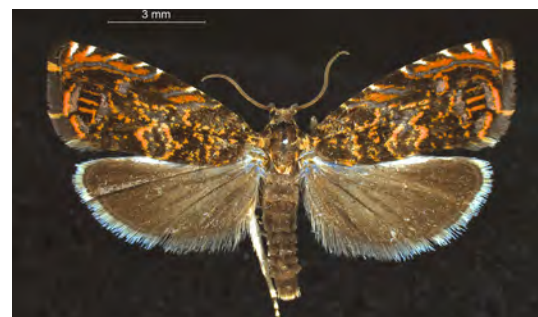
Cherry bark tortrix can attack shrubs and trees in the rose family, including apple, crabapple, cherry, plum, apricot, almond, peach, laurel, quince, firethorn, Photinia and hawthorn. Old, established orchard trees may be at risk because they have more bark irregularities where eggs are laid. Graft unions can be at risk as infestation sites, as well. The larvae will infest tunnels made by previous generations of CBT larvae, compounding damage over time on individual trees.

Description

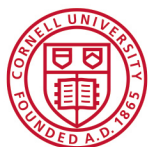
The adult moths have light orange forewings with distinct dark brown and silver-gray markings and white lines on the outer margin. The wingspan is 0.6 to 0.7 inches. Adults fly and lay eggs from April to September. Eggs are laid in or near crevices, cracks, and wounds in



Cherry bark tortrix moth at rest on a leaf. Photo: Csaba Szaboky, Bugwood.org



Cherry bark tortrix moth showing the patterned forewings and the dark grayish brown hindwings with white fringe. Photo: E. LaGasa, Wa. State Dept. Ag.



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the bark and are about 1/32 inch long, at first milky white, becoming clear red within three days of being laid. The larvae are pale gray to flesh colored, 0.3 to 0.4 inches long at maturity and resemble codling moth larvae. During feeding, larvae make tubes of frass and silk that protrude from feeding sites. There is one generation per year, overwintering as larvae under the bark. Pupae form in or just below the distinctive frass tubes made by the feeding larvae. Infested trees respond to feeding with gumming or sap and frass tubes may contain plant exudate.

Damage

Wounded tissue, graft unions and the base of the tree are favored feeding sites. The larvae feed on phloem tissues from the cambial layer to the cork cambium in curving tunnels, destroying the food-conducting tissue and hindering transport of nutrients to roots. Feeding also creates wounds that leave the tree susceptible to secondary attack and environmental stress. Trees may exhibit dieback and wilting in the canopy and swollen, cankered areas on branches and trunks associated with feeding sites. Severely infested trees may be killed.

For More Information

Cherry bark tortrix. 1993. E. H. Beers, M. W. Klaus, and E. LaGasa. Orchard Pest Management Online, Washington State University.

<http://jenny.tfrec.wsu.edu/opm/displaySpecies.php?pn=570>

Cherry bark tortrix moth. 1993. R.L. Westcott and J.D. DeAngelis. New Pest Alert, Oregon State University Extension Service.

<http://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/19518/ec1409-e.pdf>



Frass tubes at feeding sites on a cherry tree trunk.
Photo: E. LaGasa, Wa. State Dept. Ag.